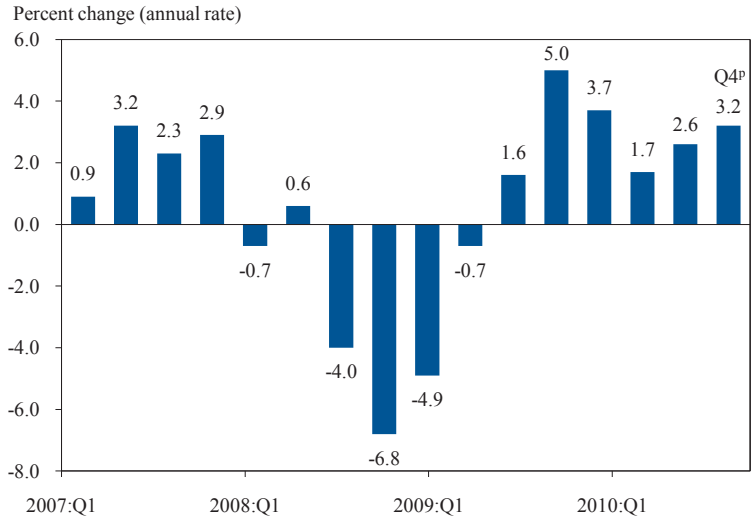
CHAPTER 2

THE YEAR IN REVIEW AND THE YEARS AHEAD

Following the deepest recession since the Great Depression, the U.S. economy completed its sixth consecutive quarter of recovery at the end of 2010. The recovery began in the second half of 2009 and the first half of 2010, but real gross domestic product (GDP) then decelerated around midyear before growth quickened again to 3.2 percent at an annual rate in the fourth quarter of 2010 (Figure 2-1). Private sector employment also decelerated during the summer, before picking up in the fourth quarter. With the financial crisis now well behind us, and considerable slack remaining in employment and resources, the U.S. economy has tremendous potential to grow without reigniting inflation.

Figure 2-1
Real GDP Growth by Quarter



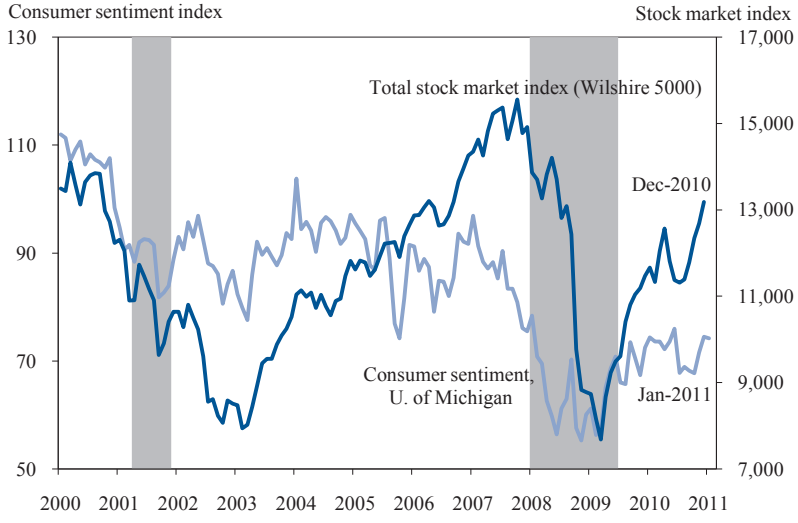
Note: Q4p indicates preliminary data for 2010:Q4.
Sources: Bureau of Economic Analysis, National Income and Product Accounts.

Consumption and Saving

Consumer spending composes about 70 percent of GDP and, as is typical, has been less volatile than the overall economy during this recession and recovery. Consumption made up about 40 percent of the decline in GDP during the recession and about 54 percent of the recent rebound. Movements in this important component of spending reflect changes in consumer sentiment, household wealth and income, credit availability, government income support programs, and taxes.

Measures of consumer sentiment fell to their lowest levels of the recession from November 2008 through February 2009 and rebounded sharply through May 2010. Confidence slipped a few points around midyear 2010 and then was roughly stable through October before picking up toward the end of the year. Nevertheless, sentiment remains well below pre-recession levels.

Figure 2-2
Consumer Sentiment and the Stock Market

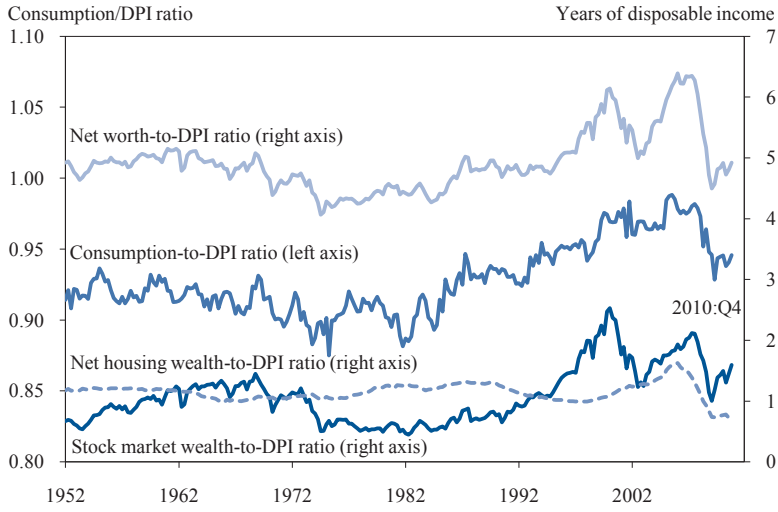


Note: Grey areas represent recessions.
Sources: Wilshire Associates Incorporated; Thompson Reuters (University of Michigan Surveys of Consumers).

Stock market fluctuations closely parallel those of consumer sentiment (Figure 2-2), with a few notable exceptions, such as during 2007, when sentiment started falling a year earlier than the stock market did. Nevertheless, sentiment and the stock market have shown similar rebounds during the recovery, recapturing by December 2010, 95 percent and 76

percent (respectively) of their recessionary decline since the December 2007 business-cycle peak. Thus, although sentiment and the stock market sometimes move independently, both have supported the 2010 growth in consumer spending.

Figure 2-3
Consumption and Net Worth Relative to Disposable Personal Income (DPI)



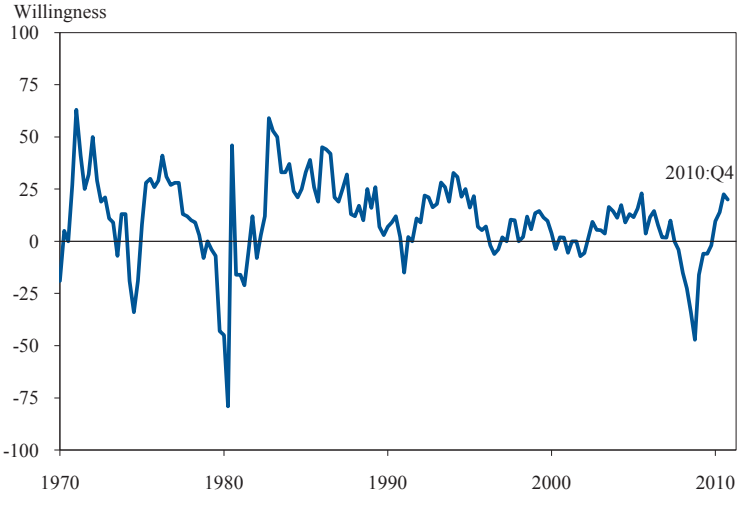
Note: Wealth components for 2010:Q4 were estimated by the CEA.
Sources: Bureau of Economic Analysis, National Income and Product Accounts; Federal Reserve Board; CEA calculations.

After consumer sentiment, a second prime determinant of consumer spending is household wealth (also called net worth). As can be seen in Figure 2-3, the consumption rate (the share of disposable income consumed) tends to fluctuate with the wealth-to-income ratio. A one dollar drop in wealth appears to reduce annual consumer spending by two to four cents. The decline in the wealth-to-income ratio from its 2007 average to its low point in the first quarter of 2009 amounted to 1.8 years of income. (In other words, household wealth declined by the amount of income earned in 1.8 years.) This was the deepest decline since compilation of these data began in 1952. Of this 1.8 year-of-income decline, 1.1 years of income was lost from stock market wealth, and about 0.6 year from housing wealth (net of mortgage debt owed). (Components of wealth aside from stock market wealth and housing wealth edged down slightly relative to income.) Since 2009:Q1, the wealth-to-income ratio has recovered about 0.4 year of income, with the rebound entirely due to stock market gains as housing and the other forms of wealth have edged a bit lower relative to disposable income. After netting out this rebound, the drop in wealth from 2007 through end-of-year 2010

has been about 1.3 years of income. A decline in wealth of this magnitude can be expected to set off an adjustment process that raises the saving rate by about 4.3 percentage points. With the saving rate having risen from an average of 1.9 percent during 2005–07 to 5.8 percent in 2010, the adjustment of personal saving to the lower level of household net worth is now in line with the fundamentals, taking the historical relationships as a guide.[1]

Another influence on consumer spending is the willingness of financial institutions to lend to households. Households prepare for lean times by saving out of regular income or by planning to draw on bank credit such as credit cards. When bank credit becomes less readily available, some households react by saving more so that they can build up their buffer stocks, and other households, who had been planning to draw on their credit lines, become unable to do so because credit is not available. The sharp decline in banks' willingness to lend during the recession (Figure 2-4) is among the reasons why the saving rate increased. During 2010, however, the Federal Reserve's Senior Loan Officers Survey shows that banks became somewhat more willing to lend to consumers.

Figure 2-4
Banks' Willingness to Lend to Consumers



Note: Willingness = the net percentage of domestic respondents reporting increased willingness to make consumer installment loans.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

[1] The model was described in the 2010 *Economic Report*, pp. 117–20.

Various income support programs have also likely influenced consumer spending during the past year. Extended unemployment benefits and emergency unemployment benefits totaled $43 billion in 2009 and $65 billion in 2010, up from $8 billion in 2008. These benefits stabilized consumer spending relative to the path that it would have taken otherwise.

Consumer spending has also been sustained by other policies such as the Making Work Pay (MWP) tax credit, which provides up to $400 ($800 for working married couples) for those with earned income up to $75,000 ($150,000 for couples), and progressively less for those with income above these limits. For the economy as a whole, MWP lowered tax liabilities (and boosted disposable income) by roughly $50 billion and $57 billion in calendar years 2009 and 2010, respectively. For 2011, MWP is being replaced—by provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act enacted by Congress at the end of 2010 (discussed more fully later in this Chapter). Provisions included a 2 percentage point, one-year reduction in the payroll tax that funds Social Security, reducing tax liabilities by about $112 billion. In addition, the new law supports consumer spending by continuing the extension of unemployment insurance through 2011. This new law was proposed, legislated, and signed after the Administration economic forecast was finalized, and so its effects are not included in that forecast.

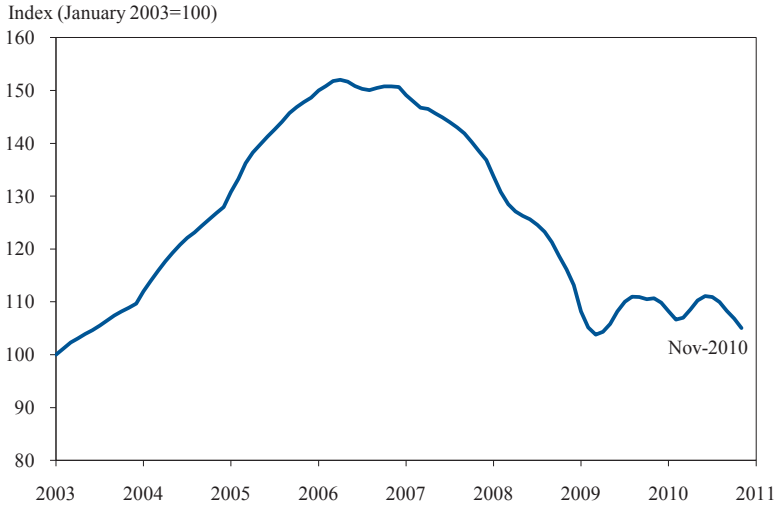
Although purchases of durable goods, such as motor vehicles and household appliances, are regarded as consumption in the national income and product accounts, they can also be considered a form of investment because they are long-lasting and provide services for the duration of ownership. Consumer durable purchases are typically more volatile than other purchases, declining faster than overall consumption during a cyclical downturn and growing faster than overall consumption during cyclical recovery periods (for example, durable goods purchases grew at an 11.1 percent annual rate during the four quarters of 2010). Rapid growth of durables purchases may pull down the saving rate temporarily at some point during the early part of the recovery.

Developments in Housing Markets

As shown in Figure 2-5, the CoreLogic home price index, a comprehensive and closely watched measure of existing home prices, dropped 32 percent from the peak of the housing market in April 2006 to the trough in March 2009, following the bursting of the housing bubble that built up between 2002 and 2005. The United States had never before suffered such a sharp drop in national house prices. Although house prices fell about 30 percent in nominal terms during the Great Depression, general price levels

at that time fell 25 percent. As a result, the real house price decline during the Great Depression was only about 7 percent. During the current episode, the overall inflation rate has slowed but not turned negative, making the recent decline in house prices far larger in real terms than that during the Depression.

Figure 2-5
House Prices



Sources: First American CoreLogic National House Price Index including distressed sales; CEA calculations.

House prices have generally stabilized since March 2009, fluctuating around a roughly flat trend line. Nonetheless, house prices have been volatile over the past year, because of unusual market conditions such as the large supply of distressed homes on the market and the short-term impetus to demand from temporary tax credits for homebuyers. Among the factors that continue to keep sales and starts below their long-run trend levels are modest income growth, slower household formation, and tighter mortgage underwriting standards, as well as heightened uncertainty among potential homebuyers and the large "shadow inventory" of foreclosed and other distressed properties on (or soon to be on) the market.

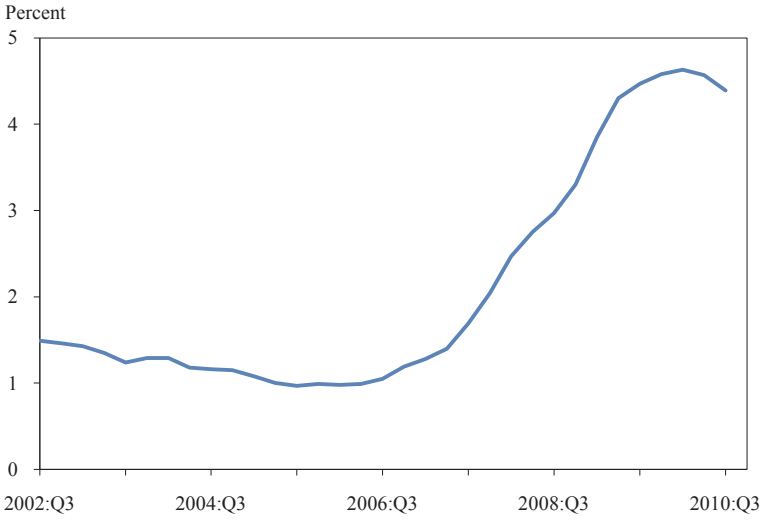
The bursting of the housing bubble has posed serious challenges to homeowners. Houses are typically leveraged assets (that is, financed with debt); according to the Census Bureau's American Housing Survey, about 68 percent of owner-occupied houses carry a mortgage. Leverage amplifies the effects of price changes on household net worth because price changes affect asset values while leaving outstanding debt unchanged. Because mortgage

debt does not change when house prices fall, declines in prices cause even larger declines in home equity (that is, the house value less total mortgage debt). For example, the owner of a $100,000 house with an $80,000 mortgage would have $20,000 in home equity. If prices fell 10 percent, the house would be worth $90,000 and home equity would fall to $10,000—a 50 percent decline in equity from a 10 percent decline in prices. The higher the leverage, the larger will be the decline in home equity for a given decline in the value of the house. For that reason, the 32 percent decline in house prices led to a 56 percent decline in home equity, resulting in a loss of about $7.5 trillion in net housing wealth over three years.

For many of the most highly leveraged households—in particular those who bought their homes near the peak of the market with no or low down payments—the decline in the value of their home was larger than their equity, meaning that their houses were worth less than their mortgages. Many of these underwater borrowers subsequently defaulted on their mortgage payments, often because they could not keep up with payments after losing income during the recession and could not sell their homes for enough to cover the mortgage debt. Although home prices in many parts of the country have stabilized, about a quarter of homeowners with mortgages remain underwater. Total negative equity is estimated to be roughly $750 billion. In the states with the highest shares of households underwater—Nevada, Arizona, Florida, Michigan, and California—a third or more of homeowners with mortgages have negative equity (in Nevada, the share is about two-thirds). These homeowners are the most likely to default on their loans: according to CoreLogic, the rate of foreclosure initiation rises steadily as negative equity increases, reaching about 14 percent for homeowners whose homes are worth less than half their mortgage balance.

As Figure 2-6 shows, although the foreclosure rate fell in 2010, it remains extraordinarily high by historical standards. The rate has stayed high partly because of long lags in the foreclosure timeline (a bank may take months or even years to resell a house after its original owner defaults on the mortgage) and partly because falling house prices exacerbated the recession, leading to job losses that fed back into more foreclosures. Problems with foreclosure paperwork that came to light last fall have contributed to the slower rate of new foreclosures as lenders take extra time to verify that foreclosures are properly documented.

Figure 2-6
Share of Mortgages in Foreclosure



Source: Mortgage Bankers Association, National Delinquency Survey.

The Obama Administration, as well as the previous Administration and the Federal Reserve, took extraordinary policy actions in response to the enormous damage done by the collapse of housing markets. In September 2008, to keep the flow of new mortgage credit open, the Treasury placed the government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, into conservatorship and committed sufficient capital to allow them to keep funding new mortgages. The Federal Housing Administration (FHA) also ramped up its lending substantially, offering new mortgages to many households who could otherwise not obtain them. At the height of the boom, the combined market share of the GSE, FHA, and Veterans Administration loans was about 36 percent of new originations; today the share is about 90 percent. Meanwhile, from early 2009 through the first quarter of 2010, the Federal Reserve purchased $1.25 trillion—and the Treasury, more than $200 billion—of mortgage-backed securities guaranteed by Fannie Mae, Freddie Mac, and the Government National Mortgage Association (Ginnie Mae) on the open market, helping to push mortgage rates to record low levels. Many households were thus able to refinance their mortgages and reduce their monthly payments.

Nonetheless, weakness in the housing market has remained, resulting in continued foreclosures. The Administration's housing programs, including the Home Affordable Refinance Program (HARP), the Housing Affordable Modification Program (HAMP), and funds allocated to state and

local housing finance agencies in the hardest-hit areas, have helped many borrowers achieve more affordable mortgages, but the housing market remains under stress in many areas, hampering the economic recovery.

Business Fixed Investment

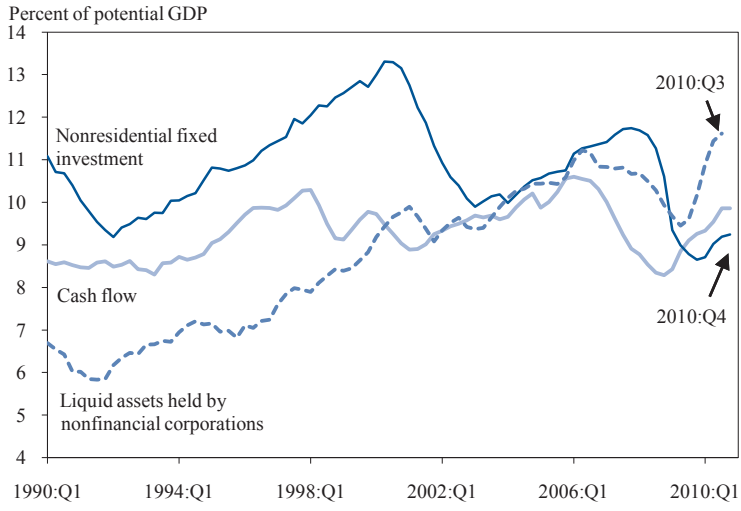
Overall nonresidential investment grew at a rapid 10 percent annual rate during the four quarters of 2010, but its two main components diverged sharply. Equipment and software investment grew 16 percent, while investment in nonresidential structures fell 6 percent.

More than a third of the growth in equipment and software investment during 2010 was in information-processing equipment and software, which grew 11 percent. A bit less than a third was in transportation equipment, which grew 55 percent (with most of the strength in motor vehicles). Investment in industrial equipment also grew notably, 15 percent (accounting for more than an eighth of equipment and software investment growth).

Within the nonresidential structures category, investment in buildings fell in 2010, but that decline was partially offset by rapid growth of investment in structures for petroleum and natural gas drilling (51 percent at an annual rate). Declines in the buildings component were widespread, from health care facilities, to office buildings, shopping centers, factories, and power generation plants. Because of the long lead time required, investment in structures tends to lag cyclical turning points.

Overall business investment may be poised to grow rapidly because firms now appear to have plenty of internal funds. Corporate profits have rebounded almost to their pre-recession level. As a result, corporate cash flow, a measure of internal funds available for investment that includes undistributed profits and depreciation, has also risen substantially during the recovery. Ordinarily, nonresidential investment exceeds corporate cash flow (Figure 2-7), and the corporate sector as a whole must borrow to finance its investments. (Noncorporate entities are also responsible for some investment.) But because of the corporate sector's recent strong growth, net corporate cash flow today is in the unusual position of exceeding investment. A large share of these investable funds has been channeled to financial investments rather than to new physical capital, as can be seen by the rising level of liquid assets held by nonfinancial corporations.

Figure 2-7
Business Fixed Investment and Cash Flow



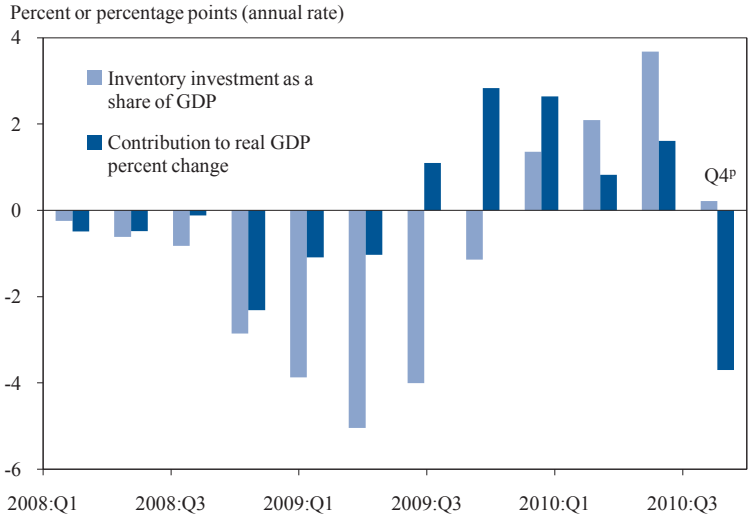
Notes: Potential GDP is a CBO estimate. Cash flow is from the National Income and Product Accounts, and nonfinancial liquid assets are plotted using their three-quarter moving averages.
Sources: Bureau of Economic Analysis, National Income and Product Accounts; Federal Reserve Board (Flow of Funds L.102); Congressional Budget Office.

Another contribution to investment growth is the forecast increase in real GDP growth in 2011 because the level of investment is often related to the growth rate of GDP. Also spurring investment during 2011 will be the provision of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act allowing full expensing for tax purposes of equipment investment put in place during the year.

Business Inventories

Inventory investment played a large role in the initial stages of recovery. Inventory investment—that is, the change in inventories—is one of the components of GDP, so the change in inventory investment (the change in the change in inventories) affects the growth of GDP. Inventory investment was increasingly negative in the first and second quarters of 2009 (the light blue bars in Figure 2-8), and the inventory contribution to GDP growth was negative (the blue bars). Inventory investment started to rise in the third quarter of 2009, from a negative value to a less-negative one, and that rise contributed positively to GDP growth through the third quarter of 2010. During the first three quarters of 2010, inventory investment

Figure 2-8
Inventory Investment and its Contribution to Real GDP Growth

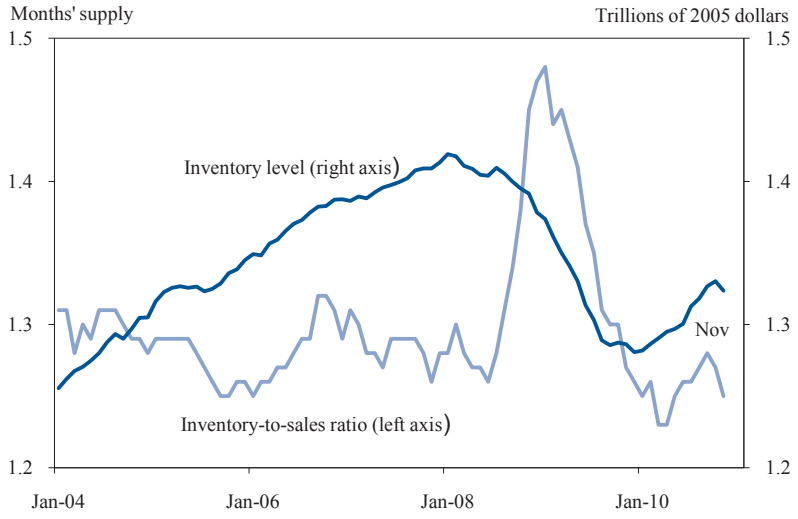


Notes: Inventory investment as a share of GDP is computed as 4 x [real inventory investment / real GDP(-1)]. Q4p indicates preliminary data for 2010:Q4.
Source: Bureau of Economic Analysis, National Income and Product Accounts; CEA calculations.

contributed an average of 1.7 percentage points at an annual rate to real GDP and accounted for more than half of the period's real GDP growth. Inventory investment commonly accounts for a high share of growth during the early stages of recovery.

By the third quarter, this recent increase in inventory investment had raised the stock of inventories, returning it to a more normal level relative to sales. The sharp fourth-quarter rise in final sales (7.1 percent at an annual rate according to preliminary data) exceeded the rise in production, and inventory investment dropped off sharply, subtracting more than 3 percentage points from GDP. Although inventories remain lean with respect to sales, they are less so than they were earlier in the recovery (Figure 2-9) so that inventory investment may play a smaller part in GDP growth over the next year than it did during the past two years.

Figure 2-9
Manufacturing and Trade Inventories



Note: The real inventory level is from the National Income and Product Accounts, and the inventory-to-sales ratio is from the Census Bureau.
Sources: Bureau of Economic Analysis, National Income and Product Accounts; Census Bureau.

Government Outlays, Consumption, and Investment

The Federal budget deficit on September 30, the end of fiscal year 2010, was $1.29 trillion, down about 8.5 percent from $1.41 trillion the year before. As a share of GDP, the deficit fell from about 10 percent in FY 2009 to 8.9 percent in FY 2010. With the recovery beginning to take hold, Federal receipts rose about 3 percent during 2010, while spending fell about 2 percent. Corporate tax receipts, in particular, increased nearly 39 percent as taxable profits rose. Despite their pickup in 2010, corporate tax receipts are still about half what they were in FY 2007—a measure of the depth of the budget hole created by the recession. Receipts from individual income taxes and payroll taxes continued to fall in FY 2010, in part because of lower labor market activity linked to the recession and in part because of tax cuts for households implemented as part of the Recovery Act of 2009.

The Recovery Act was enacted when U.S. real GDP was contracting at an annual rate of more than 6 percent and employment was falling by more than 700,000 jobs a month. The Recovery Act's spending provisions, tax cuts, and aid to states and individuals were designed to cushion the fall in demand caused by the financial crisis and the subsequent decline in consumer and business confidence, household wealth, and access to credit. As of the third quarter of 2010, the Council of Economic Advisers (CEA) estimates that the Recovery Act has raised the level of GDP, relative to what

it otherwise would have been, by 2.7 percent and raised employment, relative to what it otherwise would have been, by between 2.7 million and 3.7 million jobs.[2]

According to the Congressional Budget Office (CBO 2010), net Federal outlays arising from the financial crisis—including the Troubled Assets Relief Program (TARP), Federal deposit insurance payouts, and Treasury payments to the government-sponsored enterprises Fannie Mae and Freddie Mac—were $367 billion lower in 2010 than in 2009, because of lower spending and additional repayments of TARP loans. Repayments by banks under TARP accounted for a large share of the additional receipts. In 2009, the Administration estimated that TARP would cost $341 billion. These estimates have steadily decreased, and following recent developments such as repayments from the insurance company AIG and sales of government-owned shares of stock in General Motors and Citigroup, the President's 2012 Budget estimates TARP's deficit cost will be $48 billion. Recent estimates from the CBO are even lower. By contrast, short-term recession-related spending increased during 2010; spending on defense and entitlement programs such as Social Security and Medicare also rose, though at a slower pace than its average over the past five years. Overall, spending fell from about 25 percent of GDP in 2009 to 23.8 percent in 2010. Excluding short-term expenditures, spending relative to GDP was about 21 percent in 2010, roughly the same as its average over the past 30 years.

Deficits are expected to decline quickly over the coming years as the recovery picks up, short-term countercyclical measures wind down, and the Administration's proposed budget cuts occur. As shown in Figure 2-10, the Administration projects that the deficit as a share of GDP will fall from 10.9 percent in FY 2011 to 4.6 percent in FY 2013, and to 3.2 percent in FY 2015.

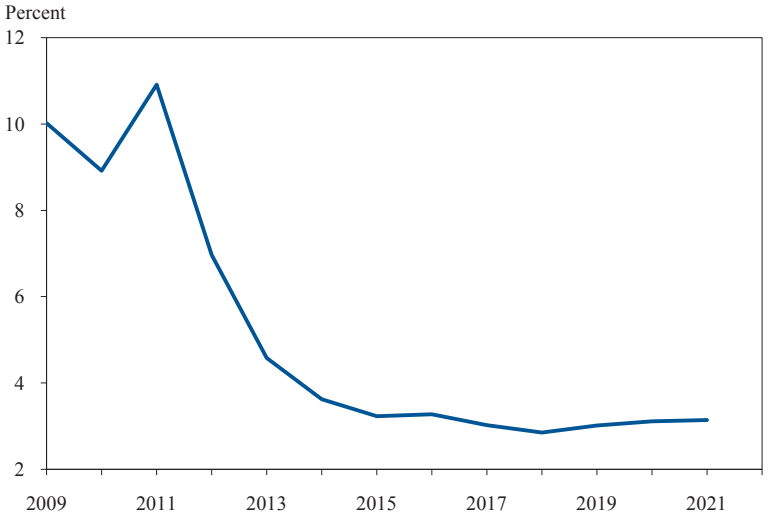
Nonetheless, major long-term fiscal challenges remain. Even before the financial crisis and ensuing recession, the long-run budget outlook was problematic, in part because a series of policy choices over the past decade had reduced projected revenue while increasing projected spending. At the same time, trying to balance the budget all at once would be counterproductive because the recovery of the private sector is still fragile and would likely be imperiled by a sharp and immediate fiscal contraction.

The 2010 Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act, passed in December 2010, extended tax cuts for all Americans for two years. As a result of the new law, families will not see their taxes increase in 2011 and 2012, as had been scheduled. It also introduces a 2 percentage point payroll tax cut that will provide about $112 billion of

[2] See CEA (2010b). The CEA uses two methods of estimating the impact of the Recovery Act on employment. The multiplier approach yields 2.7 million jobs, while the statistical projection approach yields 3.7 million.

tax relief to working Americans in 2011. In addition, the new law continues the extension of unemployment insurance so that workers who lost their job through no fault of their own will continue to receive support through 2011. Together, the tax cuts and additional unemployment insurance payments will boost consumption. The new law also introduces strong incentives to firms to invest in 2011 by allowing them to expense the full cost of their equipment investment.

Figure 2-10
Deficit as a Share of GDP



Sources: Office of Management and Budget, *Budget of the U.S. Government* (2011); Bureau of Economic Analysis, National Income and Product Accounts.

In the absence of new tax legislation, the simultaneous expiration of the Making Work Pay tax cuts and of the tax cuts enacted between 2001 and 2003 would have reduced real GDP growth over the four quarters of 2011 by 0.9–2.8 percentage points, according to the Congressional Budget Office (CBO 2011). The positive impact of the new law exceeded what most private forecasters had been expecting for fiscal policy, leading them to increase their estimates of 2011 growth. At the same time, the package is constructed to be temporary (including one- and two-year provisions) so that its effect on the long-term deficit is minimal.

Still, the need for medium- and long-term fiscal consolidation is clear. For the medium term, President Obama has announced an ambitious goal of cutting the deficit in half by 2013. To help meet that target, the Administration has proposed a number of new initiatives to help restore fiscal discipline, including a five-year freeze on nonsecurity discretionary spending, a two-year freeze on Federal wages, a slowdown in the growth

of defense spending, and eliminating earmarks from the appropriations process. These proposals build on a number of steps that the Administration has already taken to reduce deficits in coming years, the most important of which is enactment of the Patient Protection and Affordable Care Act of 2009. If the cost-control provisions of the law are followed over the next several decades, they will have a profound effect on the budget. A second critical step was the enactment of the Statutory Pay-As-You-Go Act, which requires Congress to offset most spending increases with tax increases or reduced spending elsewhere, an important move toward fiscal responsibility. In addition, economic growth will affect the long-run ratio of debt to GDP. Steps to spur that growth are discussed in depth in Chapter 3.

State and Local Government

The operating deficit of state and local government has improved during the recovery but remains precarious because of the severity of the downturn. In addition, while funds from the Recovery Act helped to support state and local revenues during 2009 and 2010, that support is scheduled to diminish. The continuing distress is evident from the 414,000 jobs that the sector lost between August 2008, the peak of state and local employment, and December 2010. The state and local sector's direct contribution to real GDP growth was negative during the four quarters of 2009 and remained so through the first quarter of 2010. Its GDP contribution was close to zero during the final three quarters of 2010.

State and local tax revenues reached a low point in the second quarter of 2009 but then grew 8 percent for the five quarters through the third quarter of 2010, recovering $103 billion, or most of their nominal decline during the preceding four quarters. Almost half of the recovery in tax receipts ($47 billion) came from corporate taxes, a source that usually provides only about 4 percent of state and local tax revenues. Sales and property taxes, by contrast, grew more slowly than the overall economy. Federal grants-in-aid (mostly for Medicaid and education) generally increased during 2009 and 2010 because of the Recovery Act, which provided a cumulative $147.1 billion in such grants through 2010:Q3.

Current state and local government expenditures—which include transfers to individuals as well as government consumption—have grown slowly since the business-cycle trough in the second quarter of 2009, at a 3.0 percent annual rate through the third quarter of 2010, compared with a 4.0 percent growth rate of nominal GDP. The combination of restrained spending growth, a recovery in tax revenues, and increased Federal transfers moved the current operating position of state and local governments from a maximum deficit of $67 billion at an annual rate in the third quarter of 2008 to a surplus of $45 billion in the third quarter of 2010.

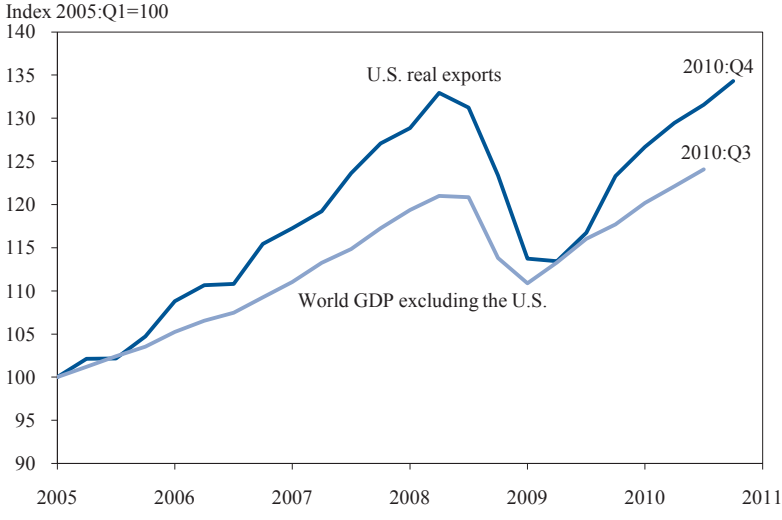
Real investment by state and local governments (which is not part of current expenditures) fell over the four quarters of 2009 and the first quarter of 2010 but edged up in the second and third quarters of 2010. The gain in investment spending likely reflects the recent increase in capital transfers for transportation under the Recovery Act.

During 2011 and 2012, state and local governments will have to make tough budget decisions. The sector is likely to show little spending growth as Federal transfers diminish and past declines in house prices restrain growth in the property tax base, which accounts for about a third of tax collections. One point of relative strength in the near term, however, is state and local construction spending (for example, on roads and bridges), as the longer-lived portions of the Recovery Act investments are translated into public infrastructure capital.

Real Exports and Imports

Real exports grew 9 percent during the four quarters of 2010, a rebound following a 3 percent contraction in 2008 and no change in 2009. The rebound coincides with a general recovery of non-U.S. GDP beginning in mid-2009 (Figure 2-11). In addition to its sensitivity to the economic strength of our trading partners, U.S. export performance also reflects movements in relative prices across countries. The broad index of the real value of the dollar rose during the recession—compounding the effect of falling world demand—but has generally fallen since March 2009, depreciating a total of 3 percent during the 12 months of 2010.

Figure 2-11
U.S. Exports and World GDP



Sources: Bureau of Economic Analysis, National Income and Product Accounts; country sources; CEA calculations.

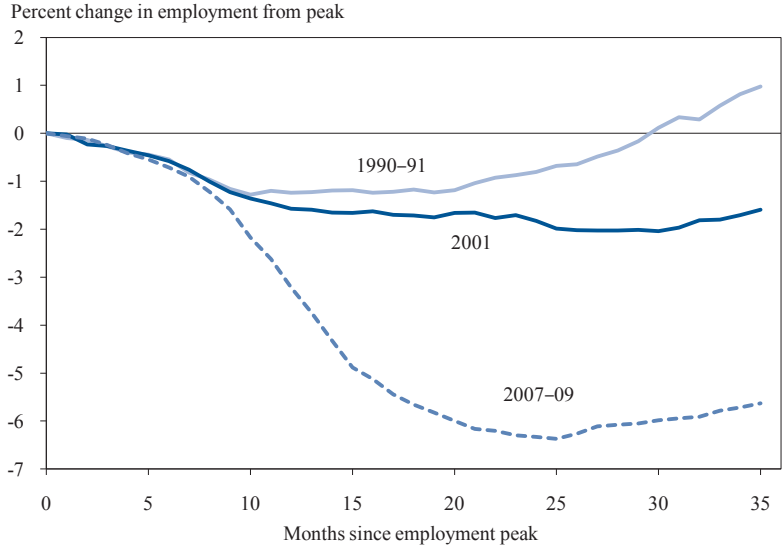
Shrinking exports subtracted from GDP growth in each quarter between 2008:Q3 and 2009:Q2, but real exports have added to GDP in every quarter since, including adding 1.1 percent to real GDP growth over the four quarters of 2010. In the coming years, a combination of strong growth in many key export markets should allow for continued growth in real exports (see Chapter 4 for a detailed discussion of the recovery of U.S. exports).

Real imports grew 11 percent during the four quarters of 2010. Although they grew faster than real exports, they had also fallen more steeply than real exports during 2008 (6 percent) and 2009 (7 percent). The pattern in real imports parallels, but is sharper than, the general shape of the contraction and rebound in overall U.S. personal consumption spending. Because imports tend to be concentrated more in goods than is overall consumer spending, real imports move more closely with goods consumption—which is cyclically sensitive—than with consumption overall. And because business equipment investment includes imported capital goods, real imports track this cyclically sensitive series as well.

Labor Market Trends

The recession's impact on the labor market was severe, and it will take time before the labor market regains full strength. Figure 2-12 illustrates the pattern of employment (excluding jobs associated with the decennial Census) from its peak for each of the previous three recessions. The figure

Figure 2-12
Path of Non-Census Employment in the Past Three Recessions

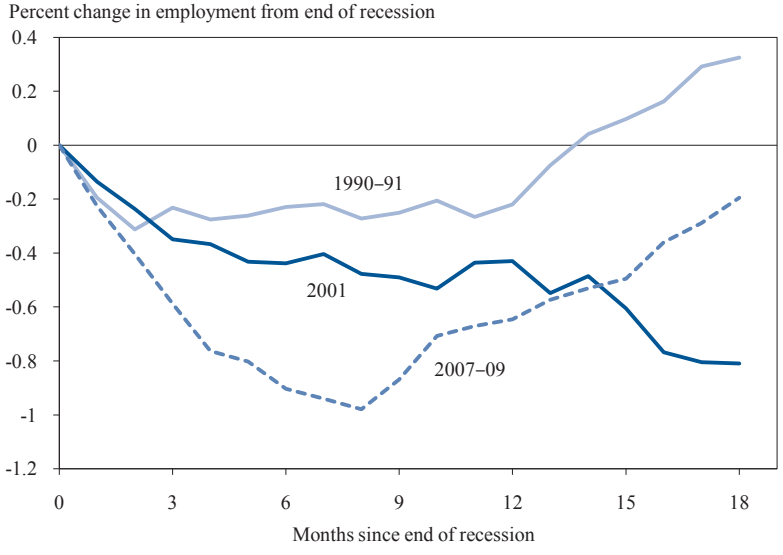


Sources: Bureau of Labor Statistics, Current Employment Statistics; CEA calculations.

shows that the first several months of job losses associated with the 2007–09 recession (the dashed line) followed a pattern almost identical to those of the two previous recessions, those of 1990–91 and 2001.[3] Beginning in summer 2008, however, job losses became more severe, resulting in a much longer and deeper recession.[4] By the time President Obama took office in January 2009, the economy was shedding more than 700,000 jobs a month, and employment reached its trough in February 2010. Between the peak of employment in January 2008 and the trough, the economy lost 8.75 million nonfarm jobs—almost as many as were lost in the past three recessions (1981–82, 1990–91, and 2001) combined, adjusting for growth in the size of the economy. Job losses as a share of the economy were the largest the United States has experienced in 65 years.

Despite these historic employment losses, sustained albeit modest job growth began relatively quickly after the recession officially ended. Figure 2-13 compares the path of non-Census employment following this recession with those of the previous two recoveries, normalized to the level of employment at the official end date of each recession. As can be seen, job losses

Figure 2-13
Path of Non-Census Employment Since the End of the Recession



Sources: Bureau of Labor Statistics, Current Employment Statistics; CEA calculations.

[3] Figures 2-12 and 2-13 show non-Census jobs. The Census hired and subsequently laid off more than half a million temporary workers in 2010. These month-to-month changes affect headline numbers but are less reflective of labor market fundamentals. Thus, we exclude Census jobs from this employment series.

[4] The official end date of the 2007–09 recession was June 2009, a full 18 months after the recession officially began. In contrast, both the 2001 and 1990–91 recessions officially lasted 8 months.

continued after the end of each recession, with the most recent recovery continuing to experience the deepest losses. However, in the recovery from the 2007–09 recession (dashed line), non-Census job growth began 9 months into the recovery and continued in each month through December 2010 (the 18th month after the end of the recession). By comparison, the 1990–91 recovery (light blue line) was somewhat delayed, experiencing no net job creation until 12 months into the recovery. In sharp contrast, the 2001 recovery (dark blue line) continued to lose jobs throughout the comparable time period, and sustained job growth did not begin until 22 months after the official end date of the recession. Thus, while the 2007–09 recession lasted longer and job losses were much deeper than in either the recession of 1990–91 or 2001, recovery in the labor market began sooner.

Beyond these trends, 2010 also saw improvements along other margins of labor adjustment. Generally speaking, one would expect the workweek and the use of temporary help to grow before total employment begins to grow, because firms can lengthen the workweek and use temporary help to increase labor input without having to bear the fixed costs, such as benefits, associated with hiring a permanent worker. During the recession, the workweek for production and nonsupervisory employees lost 0.8 hour. However, it gained back nearly two-thirds of that loss in the next 13 months, reaching 33.5 hours in July 2010, and maintained that level throughout the second half of the year. This gain is important, because a 0.1 hour gain for employed workers is roughly equivalent in terms of labor input to an increase in employment of more than 300,000 jobs. Likewise, temporary help services, which lost about 800,000 jobs during the recession, began to grow toward the end of 2009 and saw strong gains in 2010. The industry has now gained back more than half its losses.

Most important, private sector employment has grown in every month since March of 2010, adding a total of 1.1 million jobs during 2010 and recording the strongest private sector job growth since 2006. Total nonfarm employment fared nearly as well, adding more than 900,000 jobs during 2010, though this job growth was tempered by a loss of 243,000 jobs in local government.

However, it is clear that the economy still has a long way to go before it fully recovers. Recessions resulting from a financial crisis tend to be deeper than other types of recessions, and recovery from them is more difficult (Reinhart and Reinhart 2010; Reinhart and Rogoff 2009). State and local governments continue to face substantial budget shortfalls that have led to cuts in public sector employment. The national unemployment rate, which fell 0.7 percentage point from its peak to December, remains elevated, with more than 6 million people in long-term unemployment (defined as having

been jobless and searching for work for 27 weeks or more) as of December 2010.[5] Further, although the number of job seekers per job opening had fallen to 4.7 in December (from a high of more than 6), it remains unacceptably high.

Policy Responses to Support the Labor Market. The Administration's first major step in addressing the severe contraction of the labor market was the Recovery Act, which kept the employment situation from getting substantially worse. In fact, the CEA has previously estimated that in the absence of the Recovery Act, non-Census employment growth would not have begun until the third quarter of 2010 (or roughly 14 months from the official end date of the recession; see Figure 2-13), which would have placed the current recovery more in line with the slower employment responses of the previous two recessions.

In addition, in March of 2010, President Obama signed the Hiring Incentives to Restore Employment (HIRE) Act, which cuts payroll taxes for employers hiring workers who have been unemployed for at least 60 days. The law contains two key provisions. First, it exempted employers from paying their share of Social Security taxes (6.2 percent of wages) on qualified workers hired from February 4, 2010 to December 31, 2010, and offset these losses to the Social Security Trust Fund with general fund revenues; this provision of the law ended in 2010. Second, for each hire that is retained for at least one year, the law gives the employer a general business tax credit equal to 6.2 percent of that employee's yearly wages, up to a maximum of $1,000. According to the Department of the Treasury, from February to November of 2010, an estimated 11.8 million workers who had been unemployed for eight weeks or longer were hired, qualifying their employers for the HIRE Act payroll tax exemption.

In August 2010, in response to the continuing job losses in state and local government, the President signed the Education Jobs and Medicaid Assistance Act, which provided $10 billion to states to prevent layoffs of teachers. According to CEA estimates, this critical assistance supported 160,000 teacher jobs during the 2010–11 academic year.

[5] The unemployment rate is a prominent, but incomplete, measure of labor market well-being. If workers are encouraged or discouraged by labor market conditions, they may enter or exit the labor force, moving the unemployment rate in the opposite direction of the economy's momentum. However, thus far in the recession and recovery, other measures of labor underutilization (for example, the employment-to-population ratio or measures including those working part-time for economic reasons) have shown patterns similar to the unemployment rate.

In addition, the Administration made several efforts over the past year to help small businesses and promote entrepreneurship. The measures included passing numerous tax cuts for small business, signing the Small Business Jobs Act, and launching Startup America in early 2011. These policies are discussed in detail in Chapter 7.

All of these policy responses were designed to put jobless Americans back in the workplace as quickly as possible, both for their own well-being and also for that of the nation as a whole. The labor market growth seen thus far is encouraging, especially compared with the recoveries following the 1990–91 and 2001 recessions, but obviously is only a start. More robust job creation is needed.

Prices

Price inflation as measured by the consumer price index excluding food and energy (known as the core CPI) moved lower in 2010, dropping to 0.8 percent from 1.8 percent during the two preceding years. The GDP price index excluding food and energy edged up slightly to a still-low 1.1 percent. (The GDP price index is the broadest index of what is produced in the United States including investment, exports, and government services in addition to consumer goods and services.)

There have been higher rates of inflation at some early stages of goods processing, but restrained growth of unit labor costs arising from a combination of low capacity utilization, elevated unemployment, and strong productivity growth have overwhelmed other influences as commodities are processed and moved down the supply chain toward the final consumer. Further, these commodity and materials prices make up only a small share of overall goods prices. Labor costs now make up about 58 percent of costs in the nonfarm business sector, and labor costs per unit of real output fell in 2009 and 2010.

The Administration's inflation forecast reflects three balancing forces: persistent downward pressure on inflation from the high levels of economic slack, a further expected pickup in economic growth, and fairly stable inflation expectations. The Administration's projected rise in CPI inflation to 1.4 percent in 2011 moves in the direction expected by the consensus of professional forecasters.

Financial Markets

From December 2009 through December 2010, stock market values rose, and yields on Treasury notes fell, but the movements were volatile in both cases. Long-term interest rates fell during these 12 months, also with some notable fluctuations.

Stock market values—as measured by the Standard and Poor's 500 Composite Index—rose 13 percent in 2010, following a 23 percent gain in 2009. Despite the back-to-back gains, the index at year's end was still 20 percent below its October 9, 2007, peak. Corporate profits rose rapidly in 2009 and 2010, and the gains in the stock market have not kept up with the gains in earnings. As a consequence, the price-to-earnings ratio for the S&P 500 had fallen by year's end to about 17, slightly below the average of the 50 years through 2007.

Indicators of financial stress improved dramatically during 2009 and changed little during the 12 months of 2010. The spread between the 3-month interbank lending rates and 3-month Treasury bill rates was only 16 basis points (or 0.16 percentage point) by December, considerably below its 2000–07 average of 45 basis points. Similarly the spread between AA- and B-rated corporate bonds had fallen to only 3.6 percentage points, somewhat below its 2000–2007 average of 4.1 percentage points. Also during 2010, banks eased standards on commercial and industrial loans.

Yields on 10-year Treasury notes in December 2010 were 3.29 percent, down from 3.59 percent in December 2009. Ten-year yields rose early in the year but fell more than a full percentage point from April to October, likely reflecting slow economic growth and a flight to quality triggered by concerns abroad. Falling inflation expectations may also have been a factor in the mid-year decline, as suggested by the premium paid for Treasury Inflation-Protected Securities (TIPS). During the last two months of 2010, long-term rates reversed part of their earlier decline. Despite the uptick at year's end, yields on 10-year Treasury notes were still at the low end of their historical range. Real rates (that is, after subtracting inflation expectations) were also low, as indicated by the TIPS market where rates around the 10-year horizon were about 1 percent.

When the Administration's economic forecast was finalized in mid-November 2010, the projected path for 91-day Treasury bills over the next two years was calibrated from rates in the market for federal funds futures, which suggested that rates would remain extremely low in 2011 and then edge up slightly in 2012.

Table 2-1
Administration Economic Forecast

	Nominal GDP	Real GDP (chain-type)	GDP price index (chain-type)	Consumer price index (CPI-U)	Unemployment rate (percent)	Interest rate, 91-day Treasury bills (percent)	Interest rate, 10-year Treasury notes (percent)	Nonfarm payroll employment (average monthly change, Q4-to-Q4, thousands)
	Percent change, Q4-to-Q4				Level, calendar year			
2009 (actual)	0.6	0.2	0.5	1.5	9.3	0.2	3.3	-44
2010	4.0	2.5	1.5	1.0	9.6	0.1	3.2	76
2011	4.3	3.1	1.2	1.4	9.3	0.2	3.0	146
2012	5.7	4.0	1.6	1.9	8.6	0.9	3.6	194
2013	6.2	4.5	1.6	1.9	7.5	2.6	4.2	275
2014	6.0	4.2	1.7	2.0	6.6	3.7	4.6	277
2015	5.4	3.6	1.7	2.0	5.9	4.0	4.9	224
2016	5.1	3.2	1.8	2.1	5.5	4.1	5.2	182
2017	4.5	2.7	1.8	2.1	5.3	4.1	5.3	138
2018	4.3	2.5	1.8	2.1	5.3	4.1	5.3	113
2019	4.4	2.5	1.8	2.1	5.3	4.1	5.3	99
2020	4.3	2.5	1.8	2.1	5.3	4.1	5.3	97
2021	4.3	2.5	1.8	2.1	5.3	4.1	5.3	93

Notes: Based on data available as of November 17, 2010. Interest rate on 91-day T-bills includes secondary market discount basis. The figures do not reflect the upcoming BLS benchmark revision, which is expected to reduce 2009 and 2010 job growth by a cumulative 366,000 jobs.
Sources: Department of Commerce (Bureau of Economic Analysis and Economics and Statistics Administration); Department of Labor (Bureau of Labor Statistics); Department of the Treasury; Office of Management and Budget; CEA calculations.

The Long-Term Outlook

Looking ahead, the Administration projects moderate GDP growth of 3.1 percent in 2011, with growth then rising to an average rate of 4.1 percent during the next four years. Table 2-1 reports the Administration's forecast used in preparing the President's fiscal year 2012 Budget. (The long lead time for the budget process necessitates completing the forecast by mid-November, which was before the year-end agreement on the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.) The Administration estimates that potential GDP growth—the rate of growth of real GDP that could be sustained with the economy at full employment and steady inflation—will be roughly 2.5 percent a year (Table 2-2, line 8). During 2011, projected GDP growth is slightly stronger than potential growth, and the unemployment rate is projected to tick down. Monthly payroll employment is expected to increase each year in 2011,

2012, and 2013. In the Administration forecast, real GDP grows faster than its potential rate through 2017, gradually closing the gap between the actual and the potential level of GDP.

The growth rate of the economy over the long run is determined by the growth rate of its supply-side components, which include population, labor force participation, the ratio of nonfarm business employment to household employment, the workweek, labor productivity, and the ratio of real GDP to nonfarm business output. The Administration's forecast for the contribution of the growth rates of these supply-side factors to potential real GDP growth is shown in Table 2-2. Together, the sum of all of these components equals the growth rate of potential real GDP, which is projected at 2.5 percent a year.

Table 2-2
Components of Potential Real GDP Growth, 1953–2021

Component	Growth rate	
	1953:Q2 to 2007:Q4	2010 to 2021
1 Civilian noninstitutional population aged 16+	1.4	1.0
2 Labor force participation rate	0.2	-0.3
3 Employment rate	0.0	0.0
4 Ratio of nonfarm business employment to household employment	0.0	0.0
5 Average weekly hours (nonfarm business)	-0.3	-0.1
6 Output per hour (productivity, nonfarm business)	2.1	2.3
7 Ratio of real GDP to nonfarm business output	-0.2	-0.4
8 SUM: potential real GDP	3.2	2.5
9 Memo: actual real GDP	3.2	3.2

Note: All contributions are in percentage points at an annual rate. 1953:Q2 and 2007:Q4 are business-cycle peaks. Nonfarm business employment, workweek, and productivity come from the productivity and cost database maintained by the Bureau of Labor Statistics.
Sources: Department of the Treasury; Office of Management and Budget; CEA calculations.

Conclusion

The U.S. economy today has substantial excess capacity and therefore vast potential to grow without igniting an increase in inflation. The overall trend of economic data toward the end of 2010 has been encouraging. The Administration's efforts to continue tax cuts for the middle class, extend unemployment insurance, and provide incentives for business investment strengthen prospects for continued recovery in 2011.